

Application No. 09/197278
Page 9

Amendment
Attorney Docket No. S63.2B-6769-US01

Remarks

This Supplemental Amendment is in addition to our Amendment dated February 21, 2006 in response to the Office Action dated **October 18, 2005**.

35 USC 102(b)

1. Claims 39-58 and 60 are rejected under 35 USC 102(b) as being anticipated by Lau et al. (US 5158 548). The Office Action contends that:

Lau-'548's Fig. 11 have more structures than the present invention. However, Lau '548 includes all claimed limitation in the claims.

Claim 39 includes the following recitations:

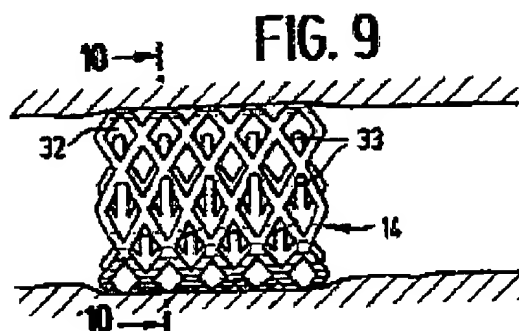
"a plurality of undulating band-like elements having a plurality of turns forming alternating peaks and troughs, each undulating band-like element extending about the longitudinal axis," and

"interconnecting elements which are circumferentially adjacent one another separated by a plurality of turns along each of the undulating band-like elements which they connect";

These limitations are not met by Fig. 11 of Lau. First Applicant notes that the zig-zags drawn in annotated Fig. 11 of Lau do not each extend about the longitudinal axis as recited in the claim. Rather, they extend in a direction parallel to the longitudinal axis...The bottom and top edges of the Lau stent do not correspond to the longitudinal axis of the stent. Rather, they extend parallel to the longitudinal axis of the stent. This can best be seen by examining Fig. 9 of Lau, reproduced below, which shows the stent of Fig. 11 expanded in a vessel. Fingers 33 extend along the length of the stent in Fig. 9 thus clarifying that the "zig zag" traced out in annotated Fig. 11 also runs lengthwise.

Application No. 09/197278
Page 10

Amendment
Attorney Docket No. S63.2B-6769-US01



Second, Applicant notes that the Office Action has impermissibly ignored structure, in particular, “interconnecting members”, in the annotated copy of Fig. 11 of Lau. Applicant includes herewith an annotated copy of the Office Action’s copy of Lau’s Fig. 11 which illustrates that there are additional “interconnecting members” present in Fig. 11 of Lau. When these additional interconnecting members are considered, it is clear that Lau’s Fig 11 does not anticipate the claim language, at least because “interconnecting elements which are circumferentially adjacent one another” are not “separated by a plurality of turns along each of the undulating band-like elements which they connect”, contrary to the recitation of the claim.

At least for these reasons, Lau does not anticipate claim 39.

Claim 40 includes the recitation “each undulating band-like element extending about the longitudinal axis”. This recitation is not met by the zig-zags highlighted in Fig 11 of Lau because, as discussed above, each of the zig-zags extends parallel to the longitudinal axis rather than “about the longitudinal axis”.

Claim 40 also includes the recitation:

wherein each second interconnecting element is separated from the third interconnecting element nearest to it by a single peak of the third undulating band-like element and a single trough of the third undulating band-like element.

This recitation also is not met. Applicant has added a fourth zig-zag in the annotated copy of Fig. 11 as well as connections to the third zig-zag. As can be seen from the modified, annotated Fig. 11, each “second interconnecting element” of Fig. 11 is separated by the “third interconnecting element nearest to it” by a single strut of the third zig-zag and not “by a single

BEST AVAILABLE COPY

Application No. 09/197278
Page 11

Amendment
Attorney Docket No. S63.2B-6769-US01

peak...and a single trough" as recited in claim 40.

At least for these reasons, claim 40 and claims 41, and 43-45 dependent therefrom are not anticipated by Fig. 11 of Lau.

Claim 46 includes the recitation "each undulating band-like element extending about the longitudinal axis". This recitation is not met for the reasons discussed above.

Claim 46 also includes the recitation:

wherein the first ends of the first interconnecting elements extend from every third peak of the proximal undulating band-like element and the second ends of the second interconnecting elements extend from every third trough of the distal undulating band-like element.

This recitation is also not met in annotated Fig. 11 of Lau. To the contrary, the first ends of the highlighted "interconnecting members" in annotated Fig. 11 of Lau extend from every "peak" of the identified "first band".

At least for these reasons, neither claim 46 nor claims 47-49 are anticipated by Fig. 11 of Lau.

Further as to claims 47 (dependent from claim 46) and claims 48-49 dependent from claim 47, the recitation

wherein each second interconnecting element is separated from the third interconnecting element nearest to it by a single peak and a single trough of the distal undulating band-like element.

is not met for the same reasons, as discussed above, with respect to claim 40.

At least for this additional reason, claims 47-49 are not anticipated by annotated Fig. 11 of Lau.

Claim 50 and claims 51-52 dependent therefrom each include the recitation "each undulating band-like element extending about the longitudinal axis, ". This recitation is not anticipated by annotated Fig. 11 for the reasons discussed above with respect to claim 39.

Claim 50 and claims dependent therefrom also include the recitation

adjacent first interconnecting elements and the first and second paths which connect them defining one cell,

This recitation is also not met by Fig. 11. The "adjacent first interconnecting elements" of Fig. 11 and "the first and second paths which connect" them do not define one cell. They may define a plurality of cells but they don't define one cell.

Application No. 09/197278
Page 12

Amendment
Attorney Docket No. S63.2B-6769-US01

Independent claim 54¹ and claims dependent therefrom include the recitation wherein each of the cells between the first and third undulating band-like elements is bounded by two interconnecting elements, a portion of the second undulating band-like element and a portion of either the first or the third undulating band-like element.

This recitation is not met by annotated Fig. 11. There are numerous cells between the first and third undulating band-like elements which are not bounded, for example, by a portion of the second undulating band and a portion of either the first or the third undulating band-like element. One such example is shown in the attached marked-up copy of annotated and labeled "A". Cell "A" is bounded by a diamond structure which does not include any part of the first, second and third "band-like elements". The claim, on the other hand, requires that *each* of the cells between the first and third undulating band-like elements be bounded by two interconnecting elements, a portion of the second undulating band-like element and a portion of either the first or the third undulating band-like element. At least for this reason, claim 54 and claims dependent therefrom are not anticipated by Fig. 11 of Lau.

Claim 60, dependent from claim 54, includes the recitation "wherein the peaks and troughs are bulbous". Applicant is unable to discern any "bulbous" peaks or troughs in Fig. 11 of Lau. At least for this additional reason, claim 54 is further patentable over Fig. 11 of Lau.

3.

Claim 59 is rejected under 35 USC 102(e) as being anticipated by Berry et al (US 6231598).

Claim 59 includes the recitation that the turn of the first serpentine circumferential band are offset in a circumferential direction from one another and that the turns of each of the second serpentine circumferential bands are offset in a circumferential direction from one another.

These recitations are not met by the Berry stent as characterized in the Office Action. The Office Action characterizes structures 14 and 21 of Berry as constituting "first and second serpentine bands". Longitudinal segments 14 do not meet the above-mentioned claim

¹ Claim 54 has been amended to correct a clerical error. The amendment does not further limit the scope of the claim.

Application No. 09/197278
Page 13

Amendment
Attorney Docket No. S63.2B-6769-US01

recitations. The turns of longitudinal segment 14 are not all "circumferentially offset" from one another. Each turn of longitudinal segment 14 is circumferentially aligned with one other turn of the segment.

35 USC 103

1. Claims 54, 56-57 and 61 are rejected under 35 USC 103(a) as being unpatentable over Lau et al. (US 5158548) in view of Ersek (US 3657744). The Office Action states:

Ersek (Figs. 2-3) discloses stent 16A and 16B without some of connecting elements to provide openings for branch connection. It would be obvious to one of ordinary skill in the art at the time the invention was made to omit one or more interconnecting element between band-like elements of Lau-'548 stent to provide openings for branch connection.

As discussed above, independent claim 54² and claims 56-57 and 61 dependent therefrom include the recitation:

wherein each of the cells between the first and third undulating band-like elements is bounded by two interconnecting elements, a portion of the second undulating band-like element and a portion of either the first or the third undulating band-like element.

There is no teaching or suggestion in either Ersek or the combination of Ersek and Lau to selectively remove structure from the Lau stent to meet the above-mentioned limitation. Thus, if the same amount of structure is removed from the Lau stent as is removed from the stent of Fig. 2 of Ersek, the Lau stent would still not meet the recitation. Specifically, there would remain cells which are not bounded by a portion of the second undulating band-like element and a portion of either the first or the third undulating band-like element. The same is true of the stent of Fig. 3 of Ersek as well. A generic teaching that structure may be omitted does not constitute and is not suggestive of omitting sufficient structure such that the above recitation is met.

At least for this reason, the proposed combination of Lau and Ersek does not render claims 54, 56-67 or 61 obvious.

² Claim 54 has been amended to correct a clerical error. The amendment does not further limit the scope of the claim.

Application No. 09/197278
Page 14

Amendment
Attorney Docket No. S63.2B-6769-US01

Conclusion

At least for the above reasons, the pending claims are seen to be patentable over the applied art. Applicant requests that the rejections be withdrawn and that application be passed to allowance.

Respectfully submitted,

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